## Work Elements with definitions

Work Category	WE Number Work Element		Definitions	NEPA Req'd?
BPA Internal Operations				
	1	BPA Environmental Compliance - External	Covers any work contracted out by KEC, the Environmental Compliance arm BPA.	of N
	2	BPA Environmental Compliance - Internal	Covers any work completed internally by KEC, the Environmental Compliance arm of BPA.	ce N
	3	Computer Purchase	Covers any direct purchase of computers external to a contract.	N
	4	Land Audit	Covers the hazardous material/Phase 1 work done by Fred Walasavage's group usually in support of land acquisitions.	N
	5	Land Purchase	Covers the direct wiring of money to escrow associated with real estate transactions.	N
	6	TBL Work	Any work the Transmission Business Line provides in support of a Fish and Wildlife project. May include appraisal review, appraisals, help in developme of an MOA, real estate negotiations, and GIS work.	N ent
Data Management				
	7	Certify Data		N
	8	Maintain Database		N
	9	Produce Maps		N
Environmental Complianc	e			
	10	Conduct Hazardous Materials Survey	Any work done by a contractor related to hazardous material land audits or Phase 1 review.	N
	11	Obtain Cultural Resource Compliance	Any archeological work done by a contractor related to cultural resource surveys. May include either on the ground or literature surveys. Currently does not include work contracted out through KEC.	N
	12	Obtain ESA Compliance - NOAA	Refers to work done by the contractor in support of complying with ESA regulations developed by NOAAF. NOAAF regulations cover threatened and endangered Anadromous fish. Covers both use of the programmatic HIP BC and the approach of developing an individual BA.	
	13	Obtain ESA Compliance - USFWS	Refers to work done by the contractor in support of complying with ESA regulations developed by USFWS. USFWS regulations cover threatened an endangered species of resident fish, plants, and animals.	N d
	14	Obtain Permits	Covers any work done by the contractor related to obtaining state, local, and federal permits.	N

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Work Category	WE Number Work Element		<b>Definitions</b> N	
	15	Prepare NEPA Checklist	Covers all of the contractor's work in support of the completion of the NEPA checklist.	N
Habitat / Passage O&M				
	16	Law Enforcement		N
	17	Maintain Facility		Y
	18	Maintain Fence		Y
	19	Maintain Passage Structure		Y
	20	Maintain Roads		Ϋ́
	21	Maintain Structure		Y
	22	Maintain Vegetation		Y
	23	Manage Passage Operations		Y
	24	Operate Facility		Υ
	25	Operate Pump		Υ
	26	Prevent Trespassing		Υ
	27	Remove Debris		Y
	28	Trap and Haul		Υ
Habitat Improvement				
	29	Add Roughness/LWD	Work to add natural materials in-stream to create habitat features. (change W title to make it clarify that the work is in-stream. We're thinking about "Add Instream Habitat Features" LWD, roughness, rip-rap, and rock gabions).	E Y
	30	Channel Realignment	Any attempt to add sinuosity, meander, or otherwise return stream channel to natural state.	Υ
	31	Conduct Controlled Burn	Use of fire to improve habitat.	Υ
	32	Create Water Gap		Υ
	33	Decommission Road		Υ
	34	Develop Alternative Water Source	Includes watering troughs, spring development	Υ
	35	Develop Pond	Build a pond, most frequently for the purpose of benefiting resident fish.	Υ
	36	Develop Terrestrial Habitat Features	Install nesting boxes,	Υ
	37	Excavate Spawning Channel	Most often associated with Chum Salmon, is work to improve a channel by digging, dredging, etc. May or may not be a channel was used historically. Ma also include work to add material conducive to spawning activities.	Y
	38	Improve Road		Υ

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Work Category	WE Num	iber Work Element	<b>Definitions</b>	NEPA Req'd?
	39	Install Cattle Guard	Work to install various types of cattle guards. This activity may include the project design. Or, project design for fencing may be in the xyz work element, if the project is extremely large.	Υ
	42	Install Tidegate	Usually refers to the installation of a modified Tidegate. Could either be replacement of a pre-existing Tidegate or the installation of a new one. It is anticipated that project design work will be captured in a separate work element, due to the magnitude of the design task. O+M is usually required by often not paid for by BPA.	Y
	43	Install Water Control Structure	Usually refers to the creation of a wetland. Often requires O+M once the structure is in place, which may or may not be paid for by BPA.	Υ
	44	Nutrient Enhancement	May involve the addition of either carcasses or direct nutrient introduction via a fertilizer.	a Y
	45	Nutrient Reduction	Usually designed to reduce algal blooms.	Υ
	46	Obliterate Road		Υ
	47	Plant Vegetation	Install plants for the purposes of either erosion control or shading. May be riparian or upland in nature. Often requires O+M.	Υ
	48	Practice No-till Seeding (BMP)	Includes no-till or direct seed for any agricultural programs designed to reduce erosion or sedimentation.	e Y
	49	Reconnect Channel	Usually involves removal of material in order to re-connect channels to historical configuration.	Υ
	50	Remove / Breach Dike	Any operation to remove part or all of a dike. Also may include the installation of a cross-dike.	Υ
	51	Remove Animals	Work to remove an undesirable animal species for an area. Is often work to remove exotic species of fish. May be work to remove undesirable native species of animal.	Y
	52	Remove Mine Tailings	Work to remove remnant landscape effects from old mining operations. Could be terrestrial or aquatic in nature.	Υ
	53	Remove vegetation	Work to remove an undesirable plant species for an area. Is often work to remove exotic or non-native species of plants. May also be work to remove undesirable native plant species.	Y
	54	Stabilize Stream Bank	Any attempt to reduce stream bank erosion. May include the addition of LWD, roughness, rip-rap, and rock gabions. May or may not include some amount o plantings. For large planting efforts see "Install Plant Vegetation".	
	55	Upland Erosion and Sedimentation Control		Υ
Hatchery O&M				
	56	Acclimate Juvenile Fish		Y
	57	Develop Hatchery Annual Operations Plan		N
	58	Develop HGMP	Hatchery Genetic Management Plan	Y
	59	Incubate Eggs		Y

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Work Category	WE Nun	nber Work Element	Definitions	NEPA Req'd?
	60	Maintain Fish Health / Conduct Patholo	gy Sampling	Υ
	61	Maintain Hatchery		Υ
	62	Produce Fish		Υ
	64	Spawn Fish		Υ
	65	Transport Fish		Υ
	66	Trap/Collect/Hold Fish - Hatchery		Υ
In-stream Passage Imp	provement			
	67	Install Bridge		Y
	68	Install Culvert		Υ
	69	Install Diversion Fish Screen		Υ
	70	Install Fish Trap		Y
	71	Install Flashboards		Y
	72	Install Headgate		Y
	73	Install Hooks and Barbs		Y
	74	Install Infiltration Gallery		Y
	75	Install Inflatable Dam		Y
	76	Install Jump Pools		Υ
	77	Install Ladders		Υ
	78	Install Pump		Υ
	79	Install Pump Fish Screen		Υ
	80	Install Siphon		Υ
	81	Install Weir		Υ
	82	Install Well		Υ
	83	Notch Dam		Y
	84	Remove Diversion		Y
	85	Remove/Breach Dam		Y
	86	Water Exchange		Υ
Land Acquisition / Cor	nservation			
	87	Conduct HEP		N
	88	Conduct Land Survey		N

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Work Category	WE Nun	nber Work Element	Definitions	NEPA Req'd?
	89	Define Easement Terms and Conditions		N
	90	Develop Capital Package		N
	91	Identify Minimum Habitat Units		N
	92	Lease Land		Υ
	93	Perform Appraisal		N
	94	Perform Title Search		N
	95	Provide Legal Description		N
	96	Purchase Easement		Υ
	97	Purchase Fee Title Land		Υ
Other				
	98	Other		Υ
Planning and Coordination	n			
	99	Conduct Community Outreach		N
	100	Construction Management	Oversight of construction activities. Usually only used on larger construction activities where the construction and construction management are split out Also includes bidding the work, supporting land negotiations, What else	
	101	Create Facility Operation Manual	The development of a manual to support the O and M of a facility post-construction.	N
	102	Develop Action Plan	Usually a large, regionally coordinated plan focused on a specific type of activity in a specific area such as habitat restoration in the estuary. Often in association with the FCRPS Biological Opinion.	N
	103	Develop Annual Maintenance Plan (Facilities / Ground		N
	104	Develop Bid Package		N
	105	Develop Construction Plan		N
	106	Develop Fish Passage Operations Plan	A plan developed to coordinate the operation of multiple passage facilities of operated by multiple parties.	ften N
	107	Develop Implementation Plan		N
	108	Develop Management Plan	Covers the development of Wildlife Management Plans, Land -use Management,	nent N
	109	Develop MOA	Memorandum of Agreement - often associated with land acquisitions, construction easements.	N
	110	Develop Monitoring and Evaluation Plan		N
	111	Develop Recovery Plan		N

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Work Category	WE Nun	nber Work Element	Definitions	NEPA Req'd?
	112	Develop Subbasin Plan		N
	113	Fund or sponsor Symposia / Workshop / Meeting		N
	114	Identify and Select Projects	Covers work by the contractor to identify, prioritize, asses, and ultimately select projects. Often associated with Model Watersheds, or habitat restoration programs that coordinate multiple projects within a larger umbrel project.	N la
	115	Inventory/Assess Habitat Conditions		Υ
	116	Inventory/Assess Passage Impediments		Υ
	117	Inventory/Assess Watershed		Υ
	118	Landowner Coordination		N
	119	Manage Projects	Covers work by the contractor to manage on the ground efforts, or to manage subcontractors associated with the project.	ge N
	120	Prepare Feasibility Study	Preliminary study to determine the feasibility of a project. Often at a more conceptual stage than - Prepare Implementation Design and Budget	N
	121	Prepare Implementation Design and Budget		N
	122	Provide Technical Review	The development of technical details, engineering plans, etc and their associated costs prior to implementation or construction. Usually used on larger construction or habitat restoration projects.	N
	123	Regional Coordination		N
Predator Control				
	124	Administer Registration Sites		Υ
	125	Coordinate Payments		N
	126	Implement Removal Fisheries		Υ
Reporting				
	127	Conduct Programmatic Review		N
	128	Prepare / Submit Journal Article		N
	129	Prepare Annual Property Inventory Report		N
	130	Prepare Final / Close-out Report		N
	131	Prepare Financial Estimates		N
	132	Produce Annual Report		N
	133	Produce BiOp / Metrics Report		N
	134	Produce Daily Logs		N
	135	Produce Data Analysis Report		N

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Work Category WE Number Work E		nber Work Element	Definitions	NEPA Req'd?
	136	Produce Findings / Research Repo	rt	N
	137	Produce Milestone Report		N
	138	Produce Monitoring and Evaluation	Report	N
	139	Produce NEPA / ESA Report		N
	140	Produce Program Report		N
	141	Produce Progress Report		N
Research, Monitoring,	and Evaluatio	n		
	142	Collect Data		Y
	143	Develop Methodology		N
	144	Develop Resource Management Re	ecommendations	N
	145	Interpret Data		N
	146	Mark Fish (CWT / Fin Clipping)		Υ
	147	Submit Data to Regional Managers		N
Water Conservation				
	148	Install Flow Measuring Device		Y
	149	Install Pipeline		Υ
	150	Install Sprinkler		Υ
	151	Line Diversion Ditch		Υ
Water Rights Acquisition	on / Lease			
	152	Complete Water Entity Checklist		N
	153	Lease Water Right		Υ
	154	Negotiate Water Right Transaction		N
	155	Purchase Water Right		Υ

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